

PUBLICATION NUMBER : 2003120473
PUBLICATION DATE : 23-04-03

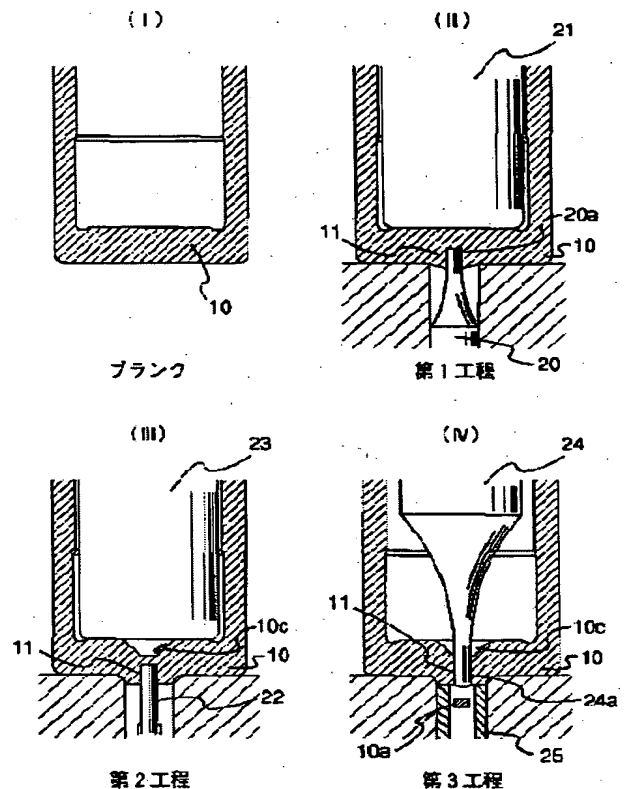
APPLICATION DATE : 18-10-01
APPLICATION NUMBER : 2001320063

APPLICANT : HITACHI CAR ENG CO LTD;

INVENTOR : KAWAHARA KEIJI;

INT.CL. : F02M 61/18 B05B 1/00

TITLE : MANUFACTURING METHOD OF
NOZZLE OR ORIFICE PLATE OF
LIQUID INJECTION VALVE, NOZZLE
OR ORIFICE PLATE OF LIQUID
INJECTION VALVE, AND FUEL
INJECTION VALVE



ABSTRACT : PROBLEM TO BE SOLVED: To press a nozzle part of an injector.

SOLUTION: In a manufacturing method of a nozzle having an orifice to measure the liquid or an orifice plate, an inlet side hole and an outlet side hole of the orifice are constituted of holes having the shearing surface. In the manufacturing method of the nozzle and the orifice plate formed of holes having a connecting face of both holes, the holes are pressed from the orifice outlet side in a first step. A seat part is transferred from the orifice inlet side in a second step. Punching is performed from the orifice inlet side in a third step. The productivity is improved thereby, and the fuel is metered with high accuracy.

COPYRIGHT: (C)2003,JPO